



#3

<110> Feldmann, Richard J.

<120> ALGORITHMIC DETERMINATION OF FLANKING DNA SEQUENCES THAT CONTROL THE EXPRESSION OF SETS OF GENES IN PROKARYOTIC, ARCHEA AND EUKARYOTIC GENOMES

<130> 3124-Z

<140> US 09/866,925

<141> 2001/05/30

<160> 249

<170> Proprietary

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175

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aacggcaaac acgccgccgg gtcagcgggg ttctcctgag aactccggca gagaaagcaa
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aaataaatgc ttgactctgt agcgggaagg cgtattatgc acaccccgcg ccgct
175

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<213> E. Coli
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 180
 tatgaa
 186

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 cccttagggg acgccacttg ctggtttgtg agtgaaagtc acctgcctta atatctcaaa
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 186

<210> 5
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 tagaacgtcg tgagacagtt cggtccctat ctgccgtggg cgctggagaa ctgagggggg
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<210> 9
 <211> 56
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56

<210> 10
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120
tcctgagaac tccggcagag aaagcaaaaa taaatgcttg actctgtagc gggaaggcgt
180
attatgcccg tcacaccatg ggagtggggtt gcaaaagaag taggtagctt aaccttcggg
240
agggcgctta ccactttgtg attcatgact ggggtgaagt cgtaacaagg taaccgtagg
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347

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120
tcctgagaac tccggcagag aaagcaaaaa taaatgcttg actctgtagc gggaaggcgt
180
attatgcccg tcacaccatg ggagtggggtt gcaaaagaag taggtagctt aaccttcggg
240
agggcgctta ccactttgtg attcatgact ggggtgaagt cgtaacaagg taaccgtagg
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347

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 120
 gaactccggc agagaaagca aaaataaatg cttgactctg tagcgggaag gcgtattatg
 180
 cacaccacac catgggagtg gggtgcaaaa gaagtaggta gcttaacctt cgggagggcg
 240
 cttaccactt tgtgattcat gactgggggtg aagtcgtaac aaggtaaccg taggggaacc
 300
 tgcggttgga tcacctcctt accttaaaga agcgt
 335

<210> 13
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 <212> DNA
 <213> E. Coli

 <220>
 <222> (2729433)...(2729505)
 <223> Chromosome = 1 Strand = negative ConnectronObjectNumber =
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<400> 13
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 acgccgccgg gc
 72

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 <222> (1062106)...(1062148)
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<400> 14
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 43

<210> 15
<211> 43
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43

<210> 16
<211> 70
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agatatttgg
70

<210> 17
<211> 70
<212> DNA
<213> H. Pylori

<220>
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<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
881

<400> 17
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agatatttgg
70

<210> 18
<211> 70
<212> DNA
<213> H. Pylori

<220>
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813

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agatatttgg
70

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<211> 70
<212> DNA
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<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
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agatatttgg
70

<210> 20
<211> 56
<212> DNA
<213> H. Pylori

<220>
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<210> 21
<211> 37
<212> DNA
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<220>
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<223> Chromosome = 4 Strand = positive ConnectronObjectNumber =
1352

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<210> 22

<211> 362
<212> DNA
<213> S. Cervesiae

<220>
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<223> Chromosome = 4 Strand = negative ConnectronObjectNumber =
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120
gaaatagtca tctaaattag tggaagctga aacgcaagga ttgataatgt aataggatca
180
atgaatatta acatataaaa cgatgataat aatatttata gaattgtgta gaattgcaga
240
ttccctttta tggattccta aatccttgag gagaacttct agtatatcta cataccta
300
attatagcct taatcacaaat ggaatcccaa caattacatc aaaatccaca ttctctacag
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362

<210> 23
<211> 311
<212> DNA
<213> S. Cervesiae

<220>
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tcacgaaccc ttataagatc tgctcatcac atacactcag catcatctaa tcctgacata
120
aacgtagttg atgctcaaaa aagaaatata ccaattaacg ctattggtga cctacaattt
180
cacttccagg acaacaccaa aacatcaata aaggtattgc acactcctaa catagcctat
240
gacttactca gtttgaatga attggctgca gtagatatca cagcatgctt taccaaaaac
300
gtcttagaac g
311

<210> 24
<211> 346
<212> DNA
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<223> Chromosome =10 Strand = positive ConnectronObjectNumber =

4213

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120
ctgtcatcga agttagagga agctgaaacg caaggattga taatgtaata ggatcaatga
180
atataaacat ataaaacgga atgaggaata atcgtaatat tagtatgtag aaatatagat
240
tccattttga ggattcctat atcctcgagg agaacttcta gtatattctg tatacctaata
300
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346
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<213>          C. Elegans
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<400>          25
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55
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<210>          26
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<212>          DNA
<213>          C. Elegans
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<222>          (620454)...(620489)
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138
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actctgcgtc tcttctcccg cattttttgt agatca
36
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<223>          Chromosome = 1 Strand = positive ConnectronObjectNumber =
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69

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<211> 89
<212> DNA
<213> C. Elegans

<220>
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<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
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<400> 28
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acaacgcgtg ggaaagtcgt gtactccac
89

<210> 29
<211> 89
<212> DNA
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<220>
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<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
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89

<210> 30
<211> 121
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121

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<211> 190
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<220>
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<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
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gcttagactt aggcttaggc ttaggcttag gcttaggctt aggtttgggc ttaggcttag
180
gcttaacctc
190

<210> 32
<211> 133
<212> DNA
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<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
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aggcttaggc tta
133

<210> 33
<211> 190
<212> DNA
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<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
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gcttagactt aggcttaggc ttaggcttag gcttaggctt aggtttgggc ttaggcttag

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gcttaacctc
190

<210> 34
<211> 65
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<223> Chromosome = 5 Strand = positive ConnectronObjectNumber =
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<211> 95
<212> DNA
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<223> Chromosome = 5 Strand = positive ConnectronObjectNumber =
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tagatcaagc cgaaatgaga cactctgaca ccacg
95

<210> 36
<211> 61
<212> DNA
<213> C. Elegans

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<223> Chromosome = 5 Strand = negative ConnectronObjectNumber =
21655

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61

<210> 37
<211> 175

<212> DNA
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120					
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175					

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aacggcaaac	acgccgccgg	gtcagcgggg	ttctcctgag	aactccggca	gagaaagcaa
120					
aaataaatgc	ttgactctgt	agcgggaagg	cgtattatgc	acaccccgcg	ccgct
175					

<210> 39
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 <220>
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60					
tataatgcg	caccactgac	acggaacaac	ggcaaacacg	ccgccgggtc	agcgggggtc
120					
tcctgagaac	tccggcagag	aaagcaaaaa	taaatgcttg	actctgtagc	gggaaggcgt
180					
attatgggag	tctgcaactc	gactccatga	agtcggaatc	gctagtaatc	gtggatcaga
240					
atgccacggt	gaatacgttc	ccgggccttg	tacacaccgc	ccgtcacacc	atgggagtg
300					
gttgcaaaag	aagtaggtag	cttaaccttc	gggagggcgc	ttaccacttt	gtgattcatg

360
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 420
 ccttaaagaa gcgttctttg
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<210> 40
 <211> 335
 <212> DNA
 <213> E. Coli

<220>
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 <223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
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<400> 40
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 gcgccaccac tgacacggaa caacggcaaa cagccgccg ggtcagcggg gttctcctga
 120
 gaactccggc agagaaagca aaaataaatg cttgactctg tagcgggaag gcgtattatg
 180
 cacaccacac catgggagtg ggttgcaaaa gaagtaggta gcttaacctt cgggagggcg
 240
 cttaccactt tgtgattcat gactggggtg aagtcgtaac aaggtaaccg taggggaacc
 300
 tgcggttggg tcacctcctt accttaaaga agcgt
 335

<210> 41
 <211> 72
 <212> DNA
 <213> E. Coli

<220>
 <222> (2729433)...(2729505)
 <223> Chromosome = 1 Strand = negative ConnectronObjectNumber =
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<400> 41
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 60
 acgccgccgg gc
 72

<210> 42
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 <212> DNA
 <213> M. Jannaschii

<220>
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 <223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
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 agaatatttg agttttattga attattcaga tttttaaaaa ttaagattaa ttaggaaagg
 120
 aaataagatt tctctaacag acaagttaaa tttttggatt taaaaagata aaaat
 175

<210> 43
 <211> 175
 <212> DNA
 <213> M. Jannaschii

<220>
 <222> (1575229)...(1575403)
 <223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
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<400> 43
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 60
 agatttttaa aaattaggat taattaggca agtaaataaa atttctctaa caaataagtt
 120
 aaatttttgg atttaaaaag ataaaaatac tctgttttat tatggaaaga aagat
 175

<210> 44
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 <212> DNA
 <213> M. Jannaschii

<220>
 <222> (1570021)...(1570158)
 <223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
 1629

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 ttcagatttt taaaaatta
 139

<210> 45
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 <212> DNA
 <213> M. Jannaschii

<220>
 <222> (1575227)...(1575403)
 <223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
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 tcagattttt aaaaattagg attaattagg caagtaaata aaatttctct aacaaataag
 120
 ttaaattttt ggatttaaaa agataaaaat actctgtttt attatggaaa gaaagat
 177

<210> 46
 <211> 75
 <212> DNA
 <213> M. Jannaschii

<220>
 <222> (108469)...(108544)
 <223> Chromosome = 1 Strand = negative ConnectronObjectNumber =
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<400> 46
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 60
 tcagattttt aaaat
 75

<210> 47
 <211> 58
 <212> DNA
 <213> M. Jannaschii

<220>
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 <223> Chromosome = 1 Strand = negative ConnectronObjectNumber =
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<400> 47
 tttttattta atttctaagg gtttgctggt ttgattattt agaatatttg agttttatt
 58

<210> 48
 <211> 225
 <212> DNA
 <213> S. Cervesiae

<220>
 <222> (1071231)...(1071455)
 <223> Chromosome =12 Strand = positive ConnectronObjectNumber =
 5515

<400> 48
 aggaaattgt tgttacgaaa gtcagtgatt atgtattgtg tagtatagta tattgtaaga
 60
 aatttttttt tctaggggaat atgcgttttg atgtagtagt atttcactgt tttgatttag
 120
 tgtttggtgc acggcagtag cgagagacaa gtgggaaaga gtaggataaa aagacaatct
 180

ataaaaagta aacataaaat aaaggtagta agtagctttt ggttg
225

<210> 49
<211> 225
<212> DNA
<213> S. Cervesiae

<220>
<222> (1077921)...(1078145)
<223> Chromosome =12 Strand = positive ConnectronObjectNumber =
5533

<400> 49
attatgtatt gtgtagtata gtatattgta agaaattttt ttttctaggg aatatgcgtt
60
ttgatgtagt agtatttcac tgttttgatt tagtgtttgt tgcacggcag tagcgagaga
120
caagtgggaa agagtaggat aaaaagacaa tctataaaaa gtaaacataa aataaaggta
180
gtaagtagct tttggttgaa catccgggta agagacaaca gggct
225

<210> 50
<211> 252
<212> DNA
<213> S. Cervesiae

<220>
<222> (1071231)...(1071481)
<223> Chromosome =12 Strand = positive ConnectronObjectNumber =
5516

<400> 50
aggaaattgt tgttacgaaa gtcagtgatt atgtattgtg tagtatagta tattgtaaga
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aatttttttt tctaggggaat atgcgttttg atgtagtagt atttcactgt tttgatttag
120
tgtttggtgc acggcagtag cgagagacaa gtgggaaaga gtaggataaa aagacaatct
180
ataaaaagta aacataaaat aaaggtagta agtagctttt ggttgaacat ccgggtaaga
240
gacaacaggg ct
252

<210> 51
<211> 252
<212> DNA
<213> S. Cervesiae

<220>
<222> (1077894)...(1078145)
<223> Chromosome =12 Strand = positive ConnectronObjectNumber =
5532

<400> 51
 aggaaattgt tgttacgaaa gtcagtgatt atgtattgtg tagtatagta tattgtaaga
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 aatttttttt tctagggaaat atgcgttttg atgtagtagt atttcactgt tttgatttag
 120
 tgtttgttgc acggcagtag cgagagacaa gtgggaaaga gtaggataaa aagacaatct
 180
 ataaaaagta aacataaaat aaaggtagta agtagctttt gggtgaacat ccgggtaaga
 240
 gacaacaggg ct
 252

<210> 52
 <211> 222
 <212> DNA
 <213> S. Cervesiae

<220>
 <222> (1531708)...(1531929)
 <223> Chromosome = 4 Strand = positive ConnectronObjectNumber =
 1939

<400> 52
 aggaaattgt tgttacgaaa gtcagtgatt atgtattgtg tagtatagta tattgtaaga
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 aatttttttt tctagggaaat atgcgttttg atgtagtagt atttcactgt tttgatttag
 120
 tgtttgttgc acggcagtag cgagagacaa gtgggaaaga gtaggataaa aagacaatct
 180
 ataaaaagta aacataaaat aaaggtagta agtagctttt gg
 222

<210> 53
 <211> 252
 <212> DNA
 <213> S. Cervesiae

<220>
 <222> (576521)...(576772)
 <223> Chromosome = 5 Strand = positive ConnectronObjectNumber =
 2323

<400> 53
 aggaaattgt tgttacgaaa gtcagtgatt atgtattgtg tagtatagta tattgtaaga
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 aatttttttt tctagggaaat atgcgttttg atgtagtagt atttcactgt tttgatttag
 120
 tgtttgttgc acggcagtag cgagagacaa gtgggaaaga gtaggataaa aagacaatct
 180
 ataaaaagta aacataaaat aaaggtagta agtagctttt gggtgaacat ccgggtaaga
 240
 gacaacaggg ct
 252

<210> 54
 <211> 252

<212> DNA
 <213> S. Cervesiae

 <220>
 <222> (12)...(263)
 <223> Chromosome = 5 Strand = negative ConnectronObjectNumber =
 1942

<400> 54
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 aatttttttt tctagggaaat atgcgttttg atgtagtagt atttcactgt tttgatttag
 120
 tgtttgttgc acggcagtag cgagagacaa gtgggaaaga gtaggataaa aagacaatct
 180
 ataaaaagta aacataaaat aaaggtagta agtagctttt ggttgaacat ccgggtaaga
 240
 gacaacaggg ct
 252

<210> 55
 <211> 252
 <212> DNA
 <213> S. Cervesiae

<220>
 <222> (1090588)...(1090839)
 <223> Chromosome = 7 Strand = positive ConnectronObjectNumber =
 3286

<400> 55
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 aatttttttt tctagggaaat atgcgttttg atgtagtagt atttcactgt tttgatttag
 120
 tgtttgttgc acggcagtag cgagagacaa gtgggaaaga gtaggataaa aagacaatct
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 ataaaaagta aacataaaat aaaggtagta agtagctttt ggttgaacat ccgggtaaga
 240
 gacaacaggg ct
 252

<210> 56
 <211> 252
 <212> DNA
 <213> S. Cervesiae

<220>
 <222> (562044)...(562295)
 <223> Chromosome = 8 Strand = positive ConnectronObjectNumber =
 3649

<400> 56
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 60
 aatttttttt tctagggaaat atgcgttttg atgtagtagt atttcactgt tttgatttag

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120
tgtttggtgc acggcagtag cgagagacaa gtgggaaaga gtaggataaa aagacaatct
180
ataaaaagta aacataaaat aaaggtagta agtagctttt ggttgaacat ccgggtaaga
240
gacaacaggg ct
252

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<210>          57
<211>          252
<212>          DNA
<213>          S. Cervesiae

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<220>
<222>          (5868)...(6119)
<223>          Chromosome =12 Strand = negative ConnectronObjectNumber =
4764

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<400>          57
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60
aatTTTTTTTT tctagggaaat atgcgttttg atgtagtagt atttcactgt tttgatttag
120
tgtttggtgc acggcagtag cgagagacaa gtgggaaaga gtaggataaa aagacaatct
180
ataaaaagta aacataaaat aaaggtagta agtagctttt ggttgaacat ccgggtaaga
240
gacaacaggg ct
252

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<210>          58
<211>          252
<212>          DNA
<213>          S. Cervesiae

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<220>
<222>          (231)...(482)
<223>          Chromosome =12 Strand = negative ConnectronObjectNumber =
4751

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<400>          58
aggaaattgt tgttacgaaa gtcagtgatt atgtattgtg tagtatagta tattgtaaga
60
aatTTTTTTTT tctagggaaat atgcgttttg atgtagtagt atttcactgt tttgatttag
120
tgtttggtgc acggcagtag cgagagacaa gtgggaaaga gtaggataaa aagacaatct
180
ataaaaagta aacataaaat aaaggtagta agtagctttt ggttgaacat ccgggtaaga
240
gacaacaggg ct
252

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<210>          59
<211>          252
<212>          DNA
<213>          S. Cervesiae

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<220>
 <222> (208)...(459)
 <223> Chromosome =13 Strand = negative ConnectronObjectNumber =
 5536

<400> 59
 aggaaattgt tgttacgaaa gtcagtgatt atgtattgtg tagtatagta tattgtaaga
 60
 aatttttttt tctagggaaat atgcgttttg atgtagtagt atttcactgt tttgatttag
 120
 tgtttggtgc acggcagtag cgagagacaa gtgggaaaga gtaggataaa aagacaatct
 180
 ataaaaagta aacataaaat aaaggtagta agtagctttt ggttgaacat ccgggtaaga
 240
 gacaacaggg ct
 252

<210> 60
 <211> 252
 <212> DNA
 <213> S. Cervesiae

<220>
 <222> (119)...(370)
 <223> Chromosome =14 Strand = negative ConnectronObjectNumber =
 6102

<400> 60
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 60
 aatttttttt tctagggaaat atgcgttttg atgtagtagt atttcactgt tttgatttag
 120
 tgtttggtgc acggcagtag cgagagacaa gtgggaaaga gtaggataaa aagacaatct
 180
 ataaaaagta aacataaaat aaaggtagta agtagctttt ggttgaacat ccgggtaaga
 240
 gacaacaggg ct
 252

<210> 61
 <211> 252
 <212> DNA
 <213> S. Cervesiae

<220>
 <222> (947697)...(947948)
 <223> Chromosome =16 Strand = positive ConnectronObjectNumber =
 8023

<400> 61
 aggaaattgt tgttacgaaa gtcagtgatt atgtattgtg tagtatagta tattgtaaga
 60
 aatttttttt tctagggaaat atgcgttttg atgtagtagt atttcactgt tttgatttag
 120
 tgtttggtgc acggcagtag cgagagacaa gtgggaaaga gtaggataaa aagacaatct

180
ataaaaagta aacataaaat aaaggtagta agtagctttt ggttgaacat ccgggtaaga
240
gacaacaggg ct
252

<210> 62
<211> 252
<212> DNA
<213> S. Cervesiae

<220>
<222> (28)...(278)
<223> Chromosome =16 Strand = negative ConnectronObjectNumber =
7356

<400> 62
aggaaattgt tgttacgaaa gtcagtgatt atgtattgtg tagtatagta tattgtaaga
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aatttttttt tctagggaaat atgcgttttg atgtagtagt atttcactgt tttgatttag
120
tgtttggtgc acggcagtag cgagagacaa gtgggaaaga gtaggataaa aagacaatct
180
ataaaaagta aacataaaat aaaggtagta agtagctttt ggttgaacat ccgggtaaga
240
gacaacaggg ct
252

<210> 63
<211> 89
<212> DNA
<213> S. Cervesiae

<220>
<222> (356)...(444)
<223> Chromosome = 8 Strand = negative ConnectronObjectNumber =
3293

<400> 63
aggaaattgt tgttacgaaa gtcagtgatt atgtattgtg tagtatagta tattgtaaga
60
aatttttttt tctagggaaat atgcgtttt
89

<210> 64
<211> 87
<212> DNA
<213> S. Cervesiae

<220>
<222> (268)...(354)
<223> Chromosome = 8 Strand = negative ConnectronObjectNumber =
3291

<400> 64

atgtagtagt atttcactgt tttgatttag tgtttgttgc acggcagtag cgagagacaa
60
gtgggaaaga gtaggataaa aagacaa
87

<210> 65
<211> 73
<212> DNA
<213> S. Cervesiae

<220>
<222> (28)...(100)
<223> Chromosome = 2 Strand = negative ConnectronObjectNumber =
145

<400> 65
ctataaaaag taaacataaa ataaaggtag taagtagctt ttggttgaac atccgggtaa
60
gagacaacag gct
73

<210> 66
<211> 73
<212> DNA
<213> S. Cervesiae

<220>
<222> (193)...(266)
<223> Chromosome = 8 Strand = negative ConnectronObjectNumber =
3289

<400> 66
ctataaaaag taaacataaa ataaaggtag taagtagctt ttggttgaac atccgggtaa
60
gagacaacag gct
73

<210> 67
<211> 62
<212> DNA
<213> S. Cervesiae

<220>
<222> (218)...(278)
<223> Chromosome = 2 Strand = negative ConnectronObjectNumber =
146

<400> 67
aggaaattgt tgttacgaaa gtcagtgatt atgtattgtg tagtatagta tattgtaaga
60
aa
62

<210> 68

<211> 86
 <212> DNA
 <213> C. Elegans

 <220>
 <222> (19073696)...(19073784)
 <223> Chromosome = 5 Strand = positive ConnectronObjectNumber =
 28632

<400> 68
 gcaaaaaattg actgaaaatt tgaatttccc gcaaaaaatt gactgaaaat ttgaatttcc
 60
 cgccaaaaat tgactgaaaa tttgaa
 86

<210> 69
 <211> 160
 <212> DNA
 <213> C. Elegans

 <220>
 <222> (19132234)...(19132392)
 <223> Chromosome = 5 Strand = positive ConnectronObjectNumber =
 28697

<400> 69
 caaaaaattg actgaaaatt tgaatttccc tccaaaaatt gactgaaaat ttgaatttcc
 60
 cgccaaaaat tgactgaaaa tttgaatatc ccgcaaaaaa ttgactgaaa atttgaattt
 120
 cccgccgaaa attaaatgaa aaatggaatt tctcgccgaa
 160

<210> 70
 <211> 319
 <212> DNA
 <213> C. Elegans

 <220>
 <222> (12930007)...(12930325)
 <223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
 4382

<400> 70
 attatagaaa atttaaattt ccctccaaaa aattgactga aaatttgaat ttccctccaa
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 aaattgactg aaaatttgaa tttcccgcca aaaattgact gaaaatttga atatcccgcc
 120
 aaaaattgac tgaaaatttg aatttcccgc cgaaaattaa atgaaaaatg gaatttctcg
 180
 ccgaaaaatt cagtaaaaat ttgaatttcc tgccaaaaat tgactgaaaa tttgaatttc
 240
 ttgccaaaaa agtgactggg aatttgaatt tccctccaaa aattgactga aattttgaat
 300
 ttcccgttaa aagttgact
 319

<210> 71
 <211> 319
 <212> DNA
 <213> C. Elegans

 <220>
 <222> (12928831)...(12929148)
 <223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
 4375

<400> 71
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 60
 aaattgactg aaaatttgaa tttcccgcca aaaattgact gaaaatttga atatcccgcc
 120
 aaaaattgac tgaaaatttg aatttccgc cgaaaattaa atgaaaaatg gaatttctcg
 180
 ccgaaaaatt cagtaaaaat ttgaatttcc tgccaaaaat tgactgaaaa tttgaatttc
 240
 ttgccaaaaa agtgactggg aatttgaatt tccctccaaa aattgactga aatttgaat
 300
 ttcccgctaa aagttgact
 319

<210> 72
 <211> 85
 <212> DNA
 <213> C. Elegans

 <220>
 <222> (19073700)...(19073784)
 <223> Chromosome = 5 Strand = positive ConnectronObjectNumber =
 28633

<400> 72
 caaaaattga ctgaaaattt gaatttcccg caaaaattg actgaaaatt tgaatttccc
 60
 gccaaaaatt gactgaaaat ttgaa
 85

<210> 73
 <211> 340
 <212> DNA
 <213> E. Coli

 <220>
 <222> (3941177)...(3941609)
 <223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
 3208

<400> 73
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 ttgaaacact gaacaacgaa agttgttcgt gagtctctca aattttcgca acacgatgat

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120
gaatcgaaaag aaacatcttc gggttgtgag gttaagcgac taagcgtaca cggtggatgc
180
cctggcagtg tgtttcgaca cactatcatt aactgaatcc ataggttaat gaggcgaacc
240
gggggaactg aaacatctaa gtaccccgag gaaaagaaat caaccgagat tccccagta
300
gcggcgagcg aacggggagc agcccagagc ctgaatcagt
340

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<210>          74
<211>          330
<212>          DNA
<213>          E. Coli

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<220>
<222>          (4034985)...(4035409)
<223>          Chromosome = 1 Strand = positive ConnectronObjectNumber =
3315

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<400>          74
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cgtgagtcct tcaaatcttc gcaactctga agtgaaacat cttcgggttg tgaggttaag
120
cgactaagcg tacacggttg atgccctggc agtcagaggc gatgaaggac gtgctaattc
180
gcgataggtt aatgaggcga accgggggaa ctgaaacatc taagtacccc gaggaaaaga
240
aatcaaccga gattccccc gtagcggcga gcgaacgggg agcagcccag agcctgaatc
300
agtgtgtgtg ttagtggaag cgtctggaaa
330

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<210>          75
<211>          367
<212>          DNA
<213>          E. Coli

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<220>
<222>          (3941057)...(3941609)
<223>          Chromosome = 1 Strand = positive ConnectronObjectNumber =
3206

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<400>          75
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cccctagggg acgccacttg ctggtttgtg agtgaaagtc acctgcctta atatctcaaa
120
actcatcttc gggatgatgt tgagatatct gctctttaaa aatctggatc aagctgaaaa
180
ttgaaaaccg gcgatttccg aatggggaaa cccagtgtgt ttcgacacac tatcattaac
240
tgaatccata ggtaatatgag gcgaaccggg ggaactgaaa catctaagta ccccgaggaa
300
aagaaatcaa ccgagattcc cccagtagcg gcgagcgaac ggggagcagc ccagagcctg
360

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aatcagt
367

<210> 76
<211> 113
<212> DNA
<213> E. Coli

<220>
<222> (4165923)...(4166036)
<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
3436

<400> 76
acgcaacgcg tgataagcaa ttttcgtgtc cccttcgtct agaggcccag gacaccgccc
60
tttcacggcg gtaacagggg ttcgaatccc ctaggggacg ccacttgctg gtt
113

<210> 77
<211> 150
<212> DNA
<213> E. Coli

<220>
<222> (4207315)...(4207464)
<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
3476

<400> 77
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60
gacaccgccc tttcacggcg gtaacagggg ttcgaatccc ctaggggacg ccacttgctg
120
gtttgtgagt gaaagtcacc tgccttaata
150

<210> 78
<211> 553
<212> DNA
<213> E. Coli

<220>
<222> (3941057)...(3941609)
<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
3206

<400> 78
gtccccttcg tctagaggcc caggacaccg ccctttcacg gcggtaacag gggttcgaat
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cccctagggg acgccacttg ctggtttgtg agtgaaagtc acctgcctta atatctcaaa
120
actcatcttc gggatgatgtt tgagatatct gctcttttaa aatctggatc aagctgaaaa
180
ttgaaacact gaacaacgaa agttgttcgt gagtctctca aattttcgca acacgatgat

240
 gaatcgaaag aaacatcttc gggttgtgag gttaagcgac taagcgtaca cgggtggatgc
 300
 cctggcagtc agaggcgatg aaggacgtgc taatctgcga taagcgtcgg taaggtgata
 360
 tgaaccgtta taaccggcga tttccgaatg gggaaaccca gtgtgtttcg acacactatc
 420
 attaactgaa tccataggtt aatgaggcga accgggggaa ctgaaacatc taagtacccc
 480
 gaggaaaaga aatcaaccga gattcccccga gtagcggcga gcgaacgggg agcagcccag
 540
 agcctgaatc agt
 553

<210> 79
 <211> 94
 <212> DNA
 <213> E. Coli

<220>
 <222> (4166055)...(4166149)
 <223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
 3439

<400> 79
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 60
 ggatcaagct gaaaattgaa acactgaaca acga
 94

<210> 80
 <211> 94
 <212> DNA
 <213> E. Coli

<220>
 <222> (4207485)...(4207578)
 <223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
 3478

<400> 80
 gtgatgtttg agatatttgc tctttaaaaa tctggatcaa gctgaaaatt gaaacactga
 60
 acaacgaaag ttgttcgtga gtctctcaaa tttt
 94

<210> 81
 <211> 367
 <212> DNA
 <213> E. Coli

<220>
 <222> (3941057)...(3941609)
 <223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
 3206

<400> 81
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 cccctagggg acgccacttg ctggtttgtg agtgaaagtc acctgcctta atatctcaaa
 120
 actcatcttc ggggtgatgtt tgagatattt gctctttaaa aatctggatc aagctgaaaa
 180
 ttgaaaaccg gcgatttccg aatggggaaa ccagtggtgt ttcgacacac tatcattaac
 240
 tgaatccata ggттаатgag gcgaaccggg ggaactgaaa catctaagta ccccgaggaa
 300
 aagaaatcaa ccgagattcc ccagtagcgc gcgagcgaac ggggagcagc ccagagcctg
 360
 aatcagt
 367

<210> 82
 <211> 355
 <212> DNA
 <213> E. Coli

<220>
 <222> (4166171)...(4169315)
 <223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
 3441

<400> 82
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 taagcgtaca cgggtggatgc cctggcagtc agaggcgatg aaggacgtgc taatctgcga
 120
 taagcgtcgg taaggtgata tgaaccgtta taaccggcga tttccgaatg gggaaaccca
 180
 gtgtgtgatg agagaagatt ttcagcctga tacagattaa atcagaacgc agaagcggtc
 240
 tgataaaaca gaatttgcct ggcggcagta gcgcggtggt cccacctgac cccatgccga
 300
 actcagaagt gaaacgccgt agcgccgatg gtagtgtggg gtctcccat gcgag
 355

<210> 83
 <211> 356
 <212> DNA
 <213> E. Coli

<220>
 <222> (4207600)...(4210745)
 <223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
 3479

<400> 83
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 60
 gtcagaggcg atgaaggacg tgctaattctg cgataagcgt cggttaagggtg atatgaaccg
 120
 ttataaccgg cgatttccga atgggggaaac ccagtggtgt tgcacacact atcattaact

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180
gaatcccaga ttaaatcaga acgcagaagc ggtctgataa aacagaattt gcctggcggc
240
agtagcgcgg tgggtcccacc tgaccccatg ccgaactcag aagtgaaacg ccgtagcgcc
300
gatggtagtg tgggggtctcc ccatgcgaga gtagggaact gccaggcatc aaatta
356

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<210>      84
<211>      367
<212>      DNA
<213>      E. Coli

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<220>
<222>      (3941057)...(3941609)
<223>      Chromosome = 1 Strand = positive ConnectronObjectNumber =
3206

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<400>      84
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cccctagggg acgccacttg ctggtttgtg agtgaaagtc acctgcctta atatctcaaa
120
actcatcttc ggggtgatgtt tgagatattt gctctttaa aatctggatc aagctgaaaa
180
ttgaaaaccg gcgatttccg aatggggaaa ccagtggtgt ttcgacacac tatcattaac
240
tgaatccata ggttaatgag gcgaaccggg ggaactgaaa catctaagta ccccgaggaa
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aagaaatcaa ccgagattcc ccagtagcgc gcgagcgaac ggggagcagc ccagagcctg
360
aatcagt
367

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<210>      85
<211>      37
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<220>
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<223>      Chromosome = 1 Strand = positive ConnectronObjectNumber =
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<400>      85
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37

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<210>      86
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<212>      DNA
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<220>
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<223>      Chromosome = 1 Strand = positive ConnectronObjectNumber =

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611

<400> 86
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59

<210> 87
<211> 177
<212> DNA
<213> M. Jannaschii

<220>
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<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
1642

<400> 87
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60
tcagattttt aaaaattagg attaattagg caagtaaata aaatttctct aacaaataag
120
ttaaatTTTT ggatttaaaa agataaaaat actctgtttt attatggaaa gaaagat
177

<210> 88
<211> 78
<212> DNA
<213> M. Jannaschii

<220>
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<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
1139

<400> 88
atttattaat tagttcaaag gatttttatt taatttctaa gggtagctg gtttgattgt
60
ttaaaaatatt tgagttaa
78

<210> 89
<211> 78
<212> DNA
<213> M. Jannaschii

<220>
<222> (1049086)...(1049164)
<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
1159

<400> 89
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tcagattttt aaaaatta

78

<210> 90
<211> 177
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<213> M. Jannaschii

<220>
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<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
1642

<400> 90
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60
tcagattttt aaaaattagg attaattagg caagtaaata aaatttctct aacaaataag
120
ttaaatTTTT ggatttaaaa agataaaaat actctgtttt attatggaaa gaaagat
177

<210> 91
<211> 175
<212> DNA
<213> M. Jannaschii

<220>
<222> (1570057)...(1570231)
<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
1630

<400> 91
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agaatatttg agttttattga attattcaga tttttaaaaa ttaagattaa ttaggaaagg
120
aaataagatt tctctaacag acaagttaaa tttttggatt taaaaagata aaaat
175

<210> 92
<211> 175
<212> DNA
<213> M. Jannaschii

<220>
<222> (1575229)...(1575403)
<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
1643

<400> 92
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agatttttaa aaattaggat taattaggca agtaaataaa atttctctaa caaataagtt
120
aaatttttgg atttaaaaag ataaaaatac tctgttttat tatggaaaga aagat
175

<210> 93
 <211> 177
 <212> DNA
 <213> M. Jannaschii

 <220>
 <222> (1575227)...(1575403)
 <223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
 1642

<400> 93
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 tcagatTTTT aaaaattagg attaattagg caagtaaata aaatttctct aacaaataag
 120
 ttaaattttt ggatttaaaa agataaaaat actctgtttt attatggaaa gaaagat
 177

<210> 94
 <211> 153
 <212> DNA
 <213> S. Cervesiae

 <220>
 <222> (9087)...(9240)
 <223> Chromosome = 2 Strand = positive ConnectronObjectNumber =
 158

<400> 94
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 60
 ttatcatata cggtgttaga agatgacgca aatgatgaga aatagtcatc taaattagtg
 120
 gaagctgaaa cgcaaggatt gataatgtaa tag
 153

<210> 95
 <211> 192
 <212> DNA
 <213> S. Cervesiae

 <220>
 <222> (29631)...(29821)
 <223> Chromosome = 2 Strand = positive ConnectronObjectNumber =
 171

<400> 95
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 ttatcatata cggtgttaga agatgacaca aatgatgaga aatagtcatc taaattagtg
 120
 gaagctgaaa cgcaaggatt gataatgtaa taggatcaat gaatattaac atataaaatg
 180
 atgataataa ta

192

<210> 96
<211> 362
<212> DNA
<213> S. Cervesiae

<220>
<222> (160231)...(160592)
<223> Chromosome = 1 Strand = negative ConnectronObjectNumber =
86

<400> 96
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tttacattac tagtatatta tcatatacgg tgtagaaga tgacgcaa at gatgagaa at
120
agtcattctaa attagtggaa gctgaaacgc aaggattgat aatgta atag gatcaatgaa
180
tataaacata taaaacggaa tgaggaataa tcgta atatt agtatgtaga aatata gatt
240
ccattttgag gattcctata tcctcgagga gaacttctag tatattctgt atacctaata
300
ttatagcctt tatcaacaat ggaatcccaa caattatctc aacattcacc catttctcag
360
aa
362

<210> 97
<211> 258
<212> DNA
<213> S. Cervesiae

<220>
<222> (220996)...(221252)
<223> Chromosome = 2 Strand = positive ConnectronObjectNumber =
293

<400> 97
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tatcatatac ggtgttaaga tgatgacata agttatgaga agctgtcatc gaagttagag
120
gaagctgaag tgcaaggatt gataatgtaa taggataatg aaacatataa aacggaatga
180
ggaataatcg taatattagt atgtagaa atagattcca ttttgaggat tcctatatcc
240
ttgaggagaa cttctagt
258

<210> 98
<211> 77
<212> DNA
<213> S. Cervesiae

<220>

<222> (259532)...(259721)
<223> Chromosome = 2 Strand = positive ConnectronObjectNumber =
317

<400> 98
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60
ttctagtata ttctgtA
77

<210> 99
<211> 362
<212> DNA
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<220>
<222> (160231)...(160592)
<223> Chromosome = 1 Strand = negative ConnectronObjectNumber =
86

<400> 99
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tttacattac tagtatatta tcatatacgg tgttagaaga tgacgcaaat gatgagaaat
120
agtcattctaa attagtggaa gctgaaacgc aaggattgat aatgtaatag gatcaatgaa
180
tataaacata taaaacggaa tgaggaataa tcgtaatat agtatgtaga aatatagatt
240
ccattttgag gattcctata tcctcgagga gaacttctag tatattctgt atacctaata
300
ttatagcctt tatcaacaat ggaatcccaa caattatctc aacattcacc catttctcag
360
aa
362

<210> 100
<211> 145
<212> DNA
<213> S. Cervesiae

<220>
<222> (590560)...(594015)
<223> Chromosome =10 Strand = negative ConnectronObjectNumber =
4295

<400> 100
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gaataatcgt aatattagta tgtagaaata tagattccat tttgaggatt cctatatacct
120
cgaggagAAC ttctagtata ttctg
145

<210> 101

<211> 180
 <212> DNA
 <213> S. Cervesiae

<220>
 <222> (617922)...(618722)
 <223> Chromosome =10 Strand = positive ConnectronObjectNumber = 4308

<400> 101
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 ggaatgagga ataatcgtaa tattagtatg tagaaatata gattccattt tgaggattcc
 120
 tatatcctcg aggagaactt ctagtatatt ctgtatacct aatattatag cctttatcaa
 180

<210> 102
 <211> 359
 <212> DNA
 <213> S. Cervesiae
 <220>
 <222> (160234)...(160592)
 <223> Chromosome = 1 Strand = positive ConnectronObjectNumber = 87

<400> 102
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 ttacattac tagtatatta tcatatacgg tgttagaaga tgacgcaa at gatgagaaat
 120
 agtcatctaa attagtggaa gctgaaacgc aaggattgat aatgtaatag gatcaatgaa
 180
 tataaacata taaaacggaa tgaggaataa tcgtaaatatt agtatgtaga aatatagatt
 240
 ccattttgag gattcctata tcctcgagga gaacttctag tatattctgt atacctata
 300
 ttatagcctt tatcaacaat ggaatcccaa caattatctc aacattcacc cattttctca
 359

<210> 103
 <211> 147
 <212> DNA
 <213> S. Cervesiae
 <220>
 <222> (586629)...(586708)
 <223> Chromosome =13 Strand = negative ConnectronObjectNumber = 5916

<400> 103
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 gaataatcgt aatattagta tgtagaaata tagattccat tttgaggatt cctatatacct
 120

cgaggagaac ttctagtata ttctgta
147

<210> 104
<211> 146
<212> DNA
<213> S. Cervesiae

<220>
<222> (599351)...(600871)
<223> Chromosome =13 Strand = negative ConnectronObjectNumber =
5923

<400> 104
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aatatagatt ccattttgag gattcctata tcctcgagga gaacttctag tatattctgt
120
atacctaata ttatagcctt tatcaa
146

<210> 105
<211> 359
<212> DNA
<213> S. Cervesiae

<220>
<222> (160234)...(160592)
<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
87

<400> 105
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tttacattac tagtatatta tcatatacgg tgttagaaga tgacgcaa at gatgagaaat
120
agtcacataa attagtggaa gctgaaacgc aaggattgat aatgtaatag gatcaatgaa
180
tataaacata taaaacggaa tgaggaataa tcgtaatat agtatgtaga aatatagatt
240
ccattttgag gattcctata tcctcgagga gaacttctag tatattctgt atacctaata
300
ttatagcctt tatcaacaat ggaatcccaa caattatctc aacattcacc catttctca
359

<210> 106
<211> 143
<212> DNA
<213> C. Elegans

<220>
<222> (1602973)...(1603115)
<223> Chromosome = 4 Strand = positive ConnectronObjectNumber =
16554

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<400>          106
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ttgtcaaatg aaagatcata gttgataaca taaattccca aagtttcata aaaatcgata
120
cgcagcgaac aaagttatca att
143

<210>          107
<211>          141
<212>          DNA
<213>          C. Elegans

<220>
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<223>          Chromosome = 4 Strand = positive ConnectronObjectNumber =
16661

<400>          107
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ataaattccc aaagtttcat aaaaatcgat acgcagcgaa caaagttatg atttttgacc
120
cggaacttat ttggagacct a
141

<210>          108
<211>          117
<212>          DNA
<213>          C. Elegans

<220>
<222>          (1129296)...(1129412)
<223>          Chromosome = 5 Strand = positive ConnectronObjectNumber =
21591

<400>          108
tattgtcaaa tgaaagatca tggttgataa cataaattcc cacaatttca taaaaatcga
60
tacgcagcga acaaagttat gattttttgac ccggaactta tttggagacc taatatt
117

<210>          109
<211>          72
<212>          DNA
<213>          C. Elegans

<220>
<222>          (1111083)...(1111154)
<223>          Chromosome = 5 Strand = positive ConnectronObjectNumber =
21565

<400>          109
ctccgagtta ggacacttgg ggtggacaaa aaattttgtg actattgtca aatgaaagat
60

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catggttgat aa
72

<210> 110
<211> 115
<212> DNA
<213> C. Elegans

<220>
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<223> Chromosome = 5 Strand = positive ConnectronObjectNumber =
21590

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tacgcagcga acaaagttat gatttttgac ccggaactta tttggagacc taata
115

<210> 111
<211> 117
<212> DNA
<213> C. Elegans

<220>
<222> (1129296)...(1129412)
<223> Chromosome = 5 Strand = positive ConnectronObjectNumber =
21591

<400> 111
tattgtcaaa tgaaagatca tggttgataa cataaattcc cacaatttca taaaaatcga
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tacgcagcga acaaagttat gatttttgac ccggaactta tttggagacc taatatt
117

<210> 112
<211> 274
<212> DNA
<213> D. Radiodurans

<220>
<222> (19204)...(19477)
<223> Chromosome = 3 Strand = positive ConnectronObjectNumber =
2654

<400> 112
cagcgttttt ctgcgtgttc ctggacggct gaacgccctg aatctctccc ggtatgcagc
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ctgctcggag agtacgattc gtcgttggtc gcaccgaagt gacgatgggg ccattccgtg
120
gggcgcgtta caccaggcga ctgtcagtac agcaatcgag agtgggctga tcagcccact
180
gtgcgttctg gccatcgacg cctcttttca ccgcaaagcc ggtcagcaca ccgcacacct
240
cggctcgttc tggaatggct gtgccgcgcg gacc

274

<210> 113
<211> 274
<212> DNA
<213> D. Radiodurans

<220>
<222> (66380)...(66653)
<223> Chromosome = 3 Strand = positive ConnectronObjectNumber =
2694

<400> 113
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gctgcaccga agtgacgatg gggccattcc gtggggcgcg ttacaccagg cgactgtcag
120
tacagcaatc gagagtgggc tgatcagccc actgtgcggt ctggccatcg acgcctcttt
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tcaccgcaaa gccggtcagc acaccgcaca cctcggctcg ttctggaatg gctgtgccgc
240
gcggaccgaa cgcggaatcg agcaatcctg ttgt
274

<210> 114
<211> 103
<212> DNA
<213> D. Radiodurans

<220>
<222> (66276)...(66378)
<223> Chromosome = 3 Strand = positive ConnectronObjectNumber =
2693

<400> 114
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ttcctgaccg tgctgctcag cgtttttctc gctgttcctg gac
103

<210> 115
<211> 186
<212> DNA
<213> D. Radiodurans

<220>
<222> (10410)...(10903)
<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
16

<400> 115
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gtcccgtgc gcaagacgca gcggaatttc ctgaccgtgc tgctcagcgt ttttctcgt
120

gttcctggac ggctgaacgc cctgaatctc tcccggtatg cagcctgctc ggagagtacg
180
attcgt
186

<210> 116
<211> 186
<212> DNA
<213> D. Radiodurans

<220>
<222> (153577)...(154071)
<223> Chromosome = 3 Strand = negative ConnectronObjectNumber =
2768

<400> 116
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60
gtccccgctgc gcaagacgca gcggaatttc ctgaccgtgc tgctcagcgt ttttctcgct
120
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180
attcgt
186

<210> 117
<211> 186
<212> DNA
<213> D. Radiodurans

<220>
<222> (19158)...(20371)
<223> Chromosome = 3 Strand = positive ConnectronObjectNumber =
2653

<400> 117
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120
cgattcgctg ttggctgcac cgaagtgcac atggggccat tccgtggggc gcgttacacc
180
aggcga
186

<210> 118
<211> 103
<212> DNA
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<220>
<222> (66276)...(66378)
<223> Chromosome = 3 Strand = positive ConnectronObjectNumber =
2692

<400> 118
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 ttcttgaccg tgctgctcag cgtttttctc gctgttcctg gac
 103

<210> 119
 <211> 103
 <212> DNA
 <213> D. Radiodurans

<220>
 <222> (134989)...(135092)
 <223> Chromosome = 3 Strand = positive ConnectronObjectNumber =
 2749

<400> 119
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 ctgcgtgttc ctggacggct gaacgccctg aatctctccc ggt
 103

<210> 120
 <211> 103
 <212> DNA
 <213> D. Radiodurans

<220>
 <222> (66276)...(66378)
 <223> Chromosome = 3 Strand = positive ConnectronObjectNumber =
 2693

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 ttcttgaccg tgctgctcag cgtttttctc gctgttcctg gac
 103

<210> 121
 <211> 274
 <212> DNA
 <213> D. Radiodurans

<220>
 <222> (66380)...(66653)
 <223> Chromosome = 3 Strand = positive ConnectronObjectNumber =
 2695

<400> 121
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 gctgcaccga agtgacgatg gggccattcc gtggggcgcg ttacaccagg cgactgtcag
 120
 tacagcaatc gagagtgggc tgatcagccc actgtgcggt ctggccatcg acgcctcttt
 180

tcaccgcaaa	gccggtcagc	acaccgcaca	cctcggctcg	ttctggaatg	gctgtgccgc
240					
gcggaccgaa	cgcggaatcg	agcaatcctg	ttgt		
274					

<210> 122
 <211> 186
 <212> DNA
 <213> D. Radiodurans

<220>
 <222> (10410)...(10903)
 <223> Chromosome = 1 Strand = positive ConnectronObjectNumber = 16

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60					
gtcccgtgctgc	gcaagacgca	gcggaatttc	ctgaccgtgc	tgctcagcgt	ttttctcgct
120					
gttcctggac	ggctgaacgc	cctgaatctc	tcccggtatg	cagcctgctc	ggagagtacg
180					
attcgt					
186					

<210> 123
 <211> 309
 <212> DNA
 <213> D. Radiodurans

<220>
 <222> (153577)...(154071)
 <223> Chromosome = 3 Strand = negative ConnectronObjectNumber = 2768

<400>	123				
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60					
gtcccgtgctgc	gcaagacgca	gcggaatttc	ctgaccgtgc	tgctcagcgt	ttttctcgct
120					
gttcctggac	ggctgaacgc	cctgaatctc	tcccggtatg	cagcctgctc	ggagagtacg
180					
attcgtcgga	ccgaacgcgg	aatcgagcaa	tcctgttgtg	ccctcattga	tgtccagcac
240					
cggcaggcct	tgacggtcga	tgtccgtcag	accctgaccg	ggtctgaggc	tccaactcgt
300					
ctggaacag					
309					

<210> 124
 <211> 103
 <212> DNA
 <213> D. Radiodurans

<220>
 <222> (66276)...(66378)

<223> Chromosome = 3 Strand = positive ConnectronObjectNumber =
2693

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ttcctgaccg tgctgctcag cgtttttctc gctgttcctg gac
103

<210> 125
<211> 186
<212> DNA
<213> D. Radiodurans

<220>
<222> (19158)...(20371)
<223> Chromosome = 3 Strand = positive ConnectronObjectNumber =
2653

<400> 125
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ctgttccttg acggctgaac gccctgaatc tctcccggtg tgcagcctgc tcggagagta
120
cgattcgctg ttggctgcac cgaagtgacg atggggccat tccgtggggc gcgttacacc
180
aggcga
186

<210> 126
<211> 67
<212> DNA
<213> A. Thaliana

<220>
<222> (499090)...(499156)
<223> Chromosome = 2 Strand = positive ConnectronObjectNumber =
423

<400> 126
tatctcttta aggattaaaa agtcaaatac taatttaatt aattaaattt aattaaaaaa
60
cgaaata
67

<210> 127
<211> 67
<212> DNA
<213> A. Thaliana

<220>
<222> (541441)...(541506)
<223> Chromosome = 2 Strand = positive ConnectronObjectNumber =
469

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60
aataacc
67

<210> 128
<211> 55
<212> DNA
<213> A. Thaliania

<220>
<222> (499167)...(499221)
<223> Chromosome = 2 Strand = positive ConnectronObjectNumber =
426

<400> 128
ttccaaaaat aataaccaat caaaatcaac atataagatt tgatatctaa atttt
55

<210> 129
<211> 55
<212> DNA
<213> A. Thaliania

<220>
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<223> Chromosome = 2 Strand = positive ConnectronObjectNumber =
430

<400> 129
ttgcggaaaa ataatatcat cattataaaa aaataattag agtttttttcg catat
55

<210> 130
<211> 118
<212> DNA
<213> A. Thaliania

<220>
<222> (1459740)...(1459856)
<223> Chromosome = 2 Strand = negative ConnectronObjectNumber =
972

<400> 130
gtatgccatt agaaataaaa ttttaaaagt aaattaattc atctctttta aaattaaaaa
60
gtcaaatact aattttaatta attaaattta attaaaaaac gaaatacatt attaattt
118

<210> 131
<211> 122
<212> DNA

<213> A. Thaliania
<220>
<222> (7695245)...(7695366)
<223> Chromosome = 4 Strand = negative ConnectronObjectNumber =
21396

<400> 131
tgccattaga aataaaattt taaagagtaa attaatttat ctctttaagg attaaaaagt
60
caaatactaa tttaattaat taaatttaat taaaaaacga aatacattat taatttccaa
120
aa
122

<210> 132
<211> 137
<212> DNA
<213> A. Thaliania

<220>
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<223> Chromosome = 2 Strand = positive ConnectronObjectNumber =
422

<400> 132
taaccttaat ttttgtaagt aattatatag gtatgccatt agaaataaaa ttttaaagag
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taaattaatt tatctcttta aggattaaaa agtcaaatac taatttaatt aattaaattt
120
aattaaaaaa cgaaata
137

<210> 133
<211> 65
<212> DNA
<213> A. Thaliania

<220>
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<223> Chromosome = 4 Strand = negative ConnectronObjectNumber =
21762

<400> 133
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acatt
65

<210> 134
<211> 65
<212> DNA
<213> A. Thaliania

<220>

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<223> Chromosome = 4 Strand = negative ConnectronObjectNumber =
21813

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acatt
65

<210> 135
<211> 56
<212> DNA
<213> A. Thaliania

<220>
<222> (11235682)...(11235740)
<223> Chromosome = 2 Strand = negative ConnectronObjectNumber =
10882

<400> 135
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56

<210> 136
<211> 132
<212> DNA
<213> D. Megalomaster

<220>
<222> (58403)...(58534)
<223> Chromosome = 4 Strand = positive ConnectronObjectNumber =
5081

<400> 136
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ttgacggact ccgtgaaaaat aattttttggc caaatttttcg cattttttgt aaggggtaac
120
atcataaaaa tt
132

<210> 137
<211> 136
<212> DNA
<213> D. Megalomaster

<220>
<222> (145976)...(146117)
<223> Chromosome = 4 Strand = positive ConnectronObjectNumber =
5102

<400> 137
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ggactccgtg aaaataattt ttggccaaat tttcgcatTT tttgtaaggg gtaacatcat
120
caaaatttgc gaaaaa
136

<210> 138
<211> 134
<212> DNA
<213> D. Megalomaster

<220>
<222> (145976)...(146109)
<223> Chromosome = 4 Strand = positive ConnectronObjectNumber =
5103

<400> 138
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ggactccgtt aaaataattt ttgaccaaTt tttcgcatTT tttgtaatca aaatttgcaa
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aaaattgaaa aaac
134

<210> 139
<211> 83
<212> DNA
<213> D. Megalomaster

<220>
<222> (58553)...(58662)
<223> Chromosome = 4 Strand = positive ConnectronObjectNumber =
5084

<400> 139
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catatttggg ccattatttc caa
83

<210> 140
<211> 62
<212> DNA
<213> D. Megalomaster

<220>
<222> (146203)...(146286)
<223> Chromosome = 4 Strand = positive ConnectronObjectNumber =
5107

<400> 140
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62

<210> 141
 <211> 87
 <212> DNA
 <213> D. Megalomaster

 <220>
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 <223> Chromosome = 4 Strand = positive ConnectronObjectNumber =
 5110

<400> 141
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 ttattttcaa tcttttgatc aaaatac
 87

<210> 142
 <211> 136
 <212> DNA
 <213> D. Megalomaster

 <220>
 <222> (146693)...(146828)
 <223> Chromosome = 4 Strand = positive ConnectronObjectNumber =
 5114

<400> 142
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 120
 caaaatttgc gaaaaa
 136

<210> 143
 <211> 378
 <212> DNA
 <213> E. Coli

 <220>
 <222> (3939277)...(3939655)
 <223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
 3200

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 ttcttaacgt cgcaagacga aaaatgaata ccaagtctca agagtgaaca cgtaattcat
 120
 tacgaagttt aattctttga gcatcaaact tttaaattga agagtttgat catggctcag
 180
 attgaacgct ggcggcaggc ctaacacatg caagtcgaac ggtaacagga aacagcttgc
 240
 tgtttcgctg acgagtggcg gacgggtgag taatgtctgg gaaactgcct gatggagggg

300
gataactact ggaaacggta gctaataccg cataacgtcg caagaccaaa gagggggacc
360
ttcgggcctc ttgccatc
378

<210> 144
<211> 378
<212> DNA
<213> E. Coli

<220>
<222> (4032994)...(4033371)
<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
3310

<400> 144
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ataccaagtc tcaagagtga acacgtaatt cattacgaag ttttaattctt tgagcgtcaa
120
acttttaaact tgaagagttt gatcatggct cagattgaac gctggcggca ggcctaacac
180
atgcaagtcg aacggtaaca ggaagaagct tgcttctttg ctgacgagtg gcggacgggt
240
gagtaatgtc tgggaaactg cctgatggag ggggataact actggaaacg gtagctaata
300
ccgcataacg tcgcaagacc aaagaggggg accttcgggc ctcttgccat cggatgtgcc
360
cagatgggat tagctagt
378

<210> 145
<211> 428
<212> DNA
<213> E. Coli

<220>
<222> (4163878)...(4165793)
<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
3432

<400> 145
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gcgccaccac tgacacggaa caacggcaaa cacgccgccg ggtcagcggg gttctcctga
120
gaactccggc agagaaagca aaaataaatg cttgactctg tagcgggaag gcgtattatg
180
cacacctgca actcgactcc atgaagtcgg aatcgctagt aatcgtggat cagaatgcc
240
cgggtgaatac gttcccgggc cttgtacaca ccgcccgta caccatggga gtgggttgca
300
aaagaagtag gtagcttaac cttcgggagg gcgcttacca ctttgtgatt catgactggg
360
gtgaagtcgt aacaaggtaa ccgtagggga acctgcgggt ggatcacctc cttaccttaa
420

agaagcgt
428

<210> 146
<211> 43
<212> DNA
<213> H. Pylori

<220>
<222> (1062106)...(1062148)
<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
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<400> 146
ttttactcat aggggttttta tagttcctag cggaactaaa gca
43

<210> 147
<211> 43
<212> DNA
<213> H. Pylori

<220>
<222> (1158533)...(1158575)
<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
882

<400> 147
tagcggaact aaagcattca tcccaaacac taaagatatt tgg
43

<210> 148
<211> 56
<212> DNA
<213> H. Pylori

<220>
<222> (1614783)...(1614838)
<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
1241

<400> 148
ttttactcat aggggttttta tagttcctag cggaactaaa gcattcatcc caaaca
56

<210> 149
<211> 225
<212> DNA
<213> S. Cervesiae

<220>
<222> (1071231)...(1071455)
<223> Chromosome =12 Strand = positive ConnectronObjectNumber =
5515

<400> 149
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 aatttttttt tctagggaaat atgcgttttg atgtagtagt atttcactgt tttgatttag
 120
 tgtttggtgc acggcagtag cgagagacaa gtgggaaaga gtaggataaa aagacaatct
 180
 ataaaaagta aacataaaat aaaggtagta agtagctttt ggttg
 225

<210> 150
 <211> 225
 <212> DNA
 <213> S. Cervesiae

<220>
 <222> (1077921)...(1078145)
 <223> Chromosome =12 Strand = positive ConnectronObjectNumber =
 5533

<400> 150
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 ttgatgtagt agtatttcac tgttttgatt tagtgtttgt tgcacggcag tagcgagaga
 120
 caagtgggaa agagtaggat aaaaagacaa tctataaaaa gtaaacataa aataaaggta
 180
 gtaagtagct tttggttgaa catccgggta agagacaaca gggct
 225

<210> 151
 <211> 252
 <212> DNA
 <213> S. Cervesiae

<220>
 <222> (119)...(370)
 <223> Chromosome =14 Strand = negative ConnectronObjectNumber =
 6102

<400> 151
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 aatttttttt tctagggaaat atgcgttttg atgtagtagt atttcactgt tttgatttag
 120
 tgtttggtgc acggcagtag cgagagacaa gtgggaaaga gtaggataaa aagacaatct
 180
 ataaaaagta aacataaaat aaaggtagta agtagctttt ggttgaacat ccgggtaaga
 240
 gacaacaggg ct
 252

<210> 152
 <211> 39

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<212>      DNA
<213>      C. Elegans

<220>
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<223>      Chromosome = 1  Strand = positive  ConnectronObjectNumber =
569

<400>      152
aaatcgagcc  cgtaaatcga  cacaagcgct  acagtagtc
39

<210>      153
<211>      42
<212>      DNA
<213>      C. Elegans

<220>
<222>      (1842580)...(1842621)
<223>      Chromosome = 1  Strand = positive  ConnectronObjectNumber =
596

<400>      153
agtgcctacag  tagtcattta  aagaattact  gtagttttcg  ct
42

<210>      154
<211>      58
<212>      DNA
<213>      C. Elegans

<220>
<222>      (8067642)...(8067699)
<223>      Chromosome = 5  Strand = positive  ConnectronObjectNumber =
24442

<400>      154
gagcccgtaa  atcgacacaa  gcgctacagt  agtcatttaa  agaattactg  tagttttc
58

<210>      155
<211>      337
<212>      DNA
<213>      E. Coli

<220>
<222>      (3943192)...(3943527)
<223>      Chromosome = 1  Strand = positive  ConnectronObjectNumber =
3216

<400>      155
agcgcaagcg  aagctcttga  tcgaagcccc  ggtaaacggc  ggccgtaact  ataacggtcc
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taaggtagcg  aaattccttg  tcgggtaagt  tccgacctgc  acgaatggcg  taatgatggc

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120
caggtgtgtct ccacccgaga ctcagtgaaa ttgaactcgc tgtgaagatg cagtgtaccc
180
gcggcaagac ggaaagaccc cgtgaacctt tactatagct tgacactgaa cattgagcct
240
tgatgtgtag gataggtggg aggctttgaa gtgtggacgc cagtctgcat ggagccgacc
300
ttgaaatacc accctttaat gtttgatggt ctaacgt
337

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<210>          156
<211>          337
<212>          DNA
<213>          E. Coli

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<220>
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<223>          Chromosome = 1 Strand = positive ConnectronObjectNumber =
3324

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agttccgacc tgcacgaatg gcgtaatgat ggccaggctg tctccacccg agactcagtg
120
aaattgaact cgctgtgaag atgcagtgta cccgcggcaa gacggaaaga ccccgatgaac
180
ctttactata gcttgacact gaacattgag ccttgatgtg taggatagggt gggaggcttt
240
gaagtgtgga cgccagtctg catggagccg accttgaaat accacccttt aatgtttgat
300
gttctaacgt tgaccogtaa tccgggttgc ggacagt
337

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<210>          157
<211>          137
<212>          DNA
<213>          E. Coli

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<220>
<222>          (3944314)...(3944450)
<223>          Chromosome = 1 Strand = positive ConnectronObjectNumber =
3225

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<400>          157
aaacagaatt tgccctggcgg ccgtagcgcg gtgggtccac ctgaccccat gccgaactca
60
gaagtgaaac gccgtagcgc cgatggtagt gtgggggtctc cccatgcbag agtagggaac
120
tgccaggcat caaatta
137

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<210>          158
<211>          285
<212>          DNA
<213>          E. Coli

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<220>
<222> (4036972)...(4038187)
<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
3323

<400> 158
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gcgaaattcc ttgtcgggta agttccgacc tgcacgaatg gcgtaatgat ggccaggctg
120
tctccacccg agactcagtg aaattgaact cgctgtgaag atgcagtgta cccgcggcaa
180
gacggaaaca gaatttgcct ggcggcagta gcgcggtggt cccacctgac cccatgccga
240
actcagaagt gaaacgccgt agcgccgatg gtagtgtggg gtctc
285

<210> 159
<211> 52
<212> DNA
<213> E. Coli

<220>
<222> (3944389)...(3944440)
<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
3227

<400> 159
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52

<210> 160
<211> 52
<212> DNA
<213> E. Coli

<220>
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<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
3329

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52

<210> 161
<211> 137
<212> DNA
<213> E. Coli

<220>
<222> (3944314)...(3944450)
<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
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<400> 161
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gaagtgaaac gccgtagcgc cgatggtagt gtgggggtctc cccatgcgag agtagggaac
120
tgccaggcat caaatta
137

<210> 162
<211> 33
<212> DNA
<213> M. Jannaschii

<220>
<222> (428220)...(428252)
<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
532

<400> 162
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33

<210> 163
<211> 47
<212> DNA
<213> M. Jannaschii

<220>
<222> (506924)...(506970)
<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
622

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47

<210> 164
<211> 64
<212> DNA
<213> M. Jannaschii

<220>
<222> (428275)...(428338)
<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
533

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aatt
64

<210> 165
<211> 139
<212> DNA
<213> M. Jannaschii

<220>
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<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
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tattttaattt ctaagggttt gctgggtttga ttatttagaa tatttgagtt tattgaatta
120
ttcagatttt taaaaatta
139

<210> 166
<211> 78
<212> DNA
<213> M. Jannaschii

<220>
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<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
1139

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ttaaaatatt tgagttta
78

<210> 167
<211> 78
<212> DNA
<213> M. Jannaschii

<220>
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<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
1159

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tcagattttt aaaaatta
78

<210> 168
<211> 64
<212> DNA
<213> M. Jannaschii

<220>
<222> (428275)...(428338)
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533

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aatt
64

<210> 169
<211> 258
<212> DNA
<213> S. Cervesiae

<220>
<222> (220996)...(221252)
<223> Chromosome = 2 Strand = positive ConnectronObjectNumber =
293

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tatcatatac ggtgttaaga tgatgacata agttatgaga agctgtcatc gaagtttagag
120
gaagctgaag tgcaaggatt gataatgtaa taggataatg aaacatataa aacggaatga
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ggaataatcg taatattagt atgtagaaat atagattcca tttgaggat tcctatatcc
240
ttgaggagaa cttctagt
258

<210> 170
<211> 77
<212> DNA
<213> S. Cervesiae

<220>
<222> (259722)...(259799)
<223> Chromosome = 2 Strand = positive ConnectronObjectNumber =
320

<400> 170
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ttctagtata ttctgta
77

<210> 171
<211> 342
<212> DNA
<213> S. Cervesiae

<220>

<222> (226562)...(226903)
<223> Chromosome = 2 Strand = positive ConnectronObjectNumber =
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gttatattat caatatatta tcatatacgg tgttaagatg atgacataag ttatgagaag
120
ctgtcatcga agttagagga agctgaagtg caaggattga taatgtaata ggataatgaa
180
acataataaaa cggaatgagg aataatcgta atattagtat gtagaaatat agattccatt
240
ttgaggattc ctatatcctt gaggagaact tctagtatat tctgtatacc taatattata
300
gcctttatca acaatggaat cccaacaatt atctcaacat tc
342

<210> 172
<211> 362
<212> DNA
<213> S. Cervesiae

<220>
<222> (160231)...(160592)
<223> Chromosome = 1 Strand = negative ConnectronObjectNumber =
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<400> 172
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tttacattac tagtatatta tcatatacgg tgttagaaga tgacgcaaata gatgagaaat
120
agtcacataa attagtggaa gctgaaacgc aaggattgat aatgtaataag gatcaatgaa
180
tataaacata taaaacggaa tgaggaataa tcgtaatat agtatgtaga aatatagatt
240
ccattttgag gattcctata tcctcgagga gaacttctag tatattctgt atacctaata
300
ttatagcctt tatcaacaat ggaatcccaa caattatctc aacattcacc catttctcag
360
aa
362

<210> 173
<211> 313
<212> DNA
<213> S. Cervesiae

<220>
<222> (535752)...(536065)
<223> Chromosome = 7 Strand = positive ConnectronObjectNumber =
2840

<400> 173
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60
tcataacgg  tggttaagatg  atgacataag  ttatgagaag  ctgtcatcga  agttagagga
120
agctgaaacg  caaggattga  taatgtaata  ggatcaatga  atataaacat  ataaaacgga
180
atgaggaata  atcgtaatat  tagtatgtag  aaatatagat  tccattttga  ggattcctat
240
atcctcgagg  agaacttcta  gtatattctg  tatacctaaa  ttatagcctt  tatcaacaat
300
ggaatcccaa  caa
313

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<210>          174
<211>          314
<212>          DNA
<213>          S. Cervesiae

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<220>
<222>          (541367)...(541680)
<223>          Chromosome = 7  Strand = positive  ConnectronObjectNumber =
2859

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aagttatgag  aagctgtcat  cgaagttaga  ggaagctgaa  acgcaaggat  tgataatgta
120
ataggatcaa  tgaatataaa  catataaaac  ggaatgagga  ataatcgtaa  tattagtagt
180
tagaaatata  gattccattt  tgaggattcc  tatatcctcg  aggagaactt  ctagtatatt
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ctgtatacct  aatattatag  cttttatcaa  caatggaatc  ccaacaatta  tctcaacatt
300
cacatatttc  tcat
314

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<210>          175
<211>          342
<212>          DNA
<213>          S. Cervesiae

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<220>
<222>          (226562)...(226903)
<223>          Chromosome = 2  Strand = positive  ConnectronObjectNumber =
298

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<400>          175
atctattaca  ttatgggtgg  tatgttgga  taaaaatcca  ctatcgtcta  tcaactaata
60
gttatattat  caatatatta  tcatatacgg  tggttaagatg  atgacataag  ttatgagaag
120
ctgtcatcga  agttagagga  agctgaagt  caaggattga  taatgtaata  ggataatgaa
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acataaaaa  cggaatgagg  aataatcgta  atattagtat  gtagaaatat  agattccatt
240
ttgaggattc  ctatatacct  gaggagaact  tctagtatat  tctgtatacc  taatattata
300

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gcctttatca acaatggaat cccaacaatt atctcaacat tc
342

<210> 176
<211> 33
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<220>
<222> (599572)...(599604)
<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
110

<400> 176
agcttaggct taagcttagg cttaagctta ggc
33

<210> 177
<211> 123
<212> DNA
<213> C. Elegans

<220>
<222> (618459)...(618581)
<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
129

<400> 177
ttctcccgca ttttttgtag atctacgtag atcaaaccga aatgaggcac tttctgaatc
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cacgagctag gcttaagctt aggcttaagc ttaggccttt tctcaggctt aggcttaggc
120
tta
123

<210> 178
<211> 89
<212> DNA
<213> C. Elegans

<220>
<222> (610997)...(611084)
<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
125

<400> 178
acgcgccgta aatctacccc agatatggcc gagccaaaat ggcctagttc ggcaaaactct
60
ttcatttcaa tttatgaggg aagccagaa
89

<210> 179
<211> 166
<212> DNA

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<213>          C. Elegans

<220>
<222>          (2309822)...(2309987)
<223>          Chromosome = 4  Strand = negative  ConnectronObjectNumber =
16859

<400>          179
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cttaggctta  agcttaggct  taagcttagg  cttaagctta  ggcttaagct  taggcttaag
120
cttaggctta  agcttaggct  taagcttagg  cttaagctta  gactta
166

<210>          180
<211>          57
<212>          DNA
<213>          C. Elegans

<220>
<222>          (1666666)...(1666721)
<223>          Chromosome = 5  Strand = positive  ConnectronObjectNumber =
22072

<400>          180
cgcaacgcgc  cgtaaattcta  cccagatat  ggccgagcca  aaatgaccta  gttcggc
57

<210>          181
<211>          170
<212>          DNA
<213>          C. Elegans

<220>
<222>          (1717752)...(1717922)
<223>          Chromosome = 5  Strand = positive  ConnectronObjectNumber =
22108

<400>          181
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atttagtttt  acaactaaaa  tcgaaccgcg  acgcgacacg  caacgcgacg  taaatctacc
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ccagatatgg  ccgagccaaa  atggcctagt  tcggcaaact  cttctatttc
170

<210>          182
<211>          89
<212>          DNA
<213>          C. Elegans

<220>
<222>          (610997)...(611084)
<223>          Chromosome = 1  Strand = positive  ConnectronObjectNumber =

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125

<400> 182
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ttcatttcaa tttatgaggg aagccagaa
89

<210> 183
<211> 71
<212> DNA
<213> E. Coli

<220>
<222> (2042554)...(2042624)
<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
1704

<400> 183
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60
atgtcactgg t
71

<210> 184
<211> 71
<212> DNA
<213> E. Coli

<220>
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<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
1718

<400> 184
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60
gagccaaatt c
71

<210> 185
<211> 98
<212> DNA
<213> E. Coli

<220>
<222> (2042554)...(2042651)
<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
1705

<400> 185
cgccccgttc acacgattcc tctgtagttc agtcggtaga acggcggact gttaatccgt
60
atgtcactgg ttcgagtcca gtcagaggag ccaaattc

98

<210> 186
<211> 86
<212> DNA
<213> E. Coli

<220>
<222> (2056044)...(2056129)
<223> Chromosome = 1 Strand = negative ConnectronObjectNumber =
1713

<400> 186
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tcgagtccag tcagaggagc caaatt
86

<210> 187
<211> 98
<212> DNA
<213> E. Coli

<220>
<222> (2042554)...(2042651)
<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
1705

<400> 187
cgccccgttc acacgattcc tctgtagttc agtcggtaga acggcggact gttaatccgt
60
atgtcactgg ttcgagtcca gtcagaggag ccaaattc
98

<210> 188
<211> 86
<212> DNA
<213> E. Coli

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<223> Chromosome = 1 Strand = negative ConnectronObjectNumber =
1713

<400> 188
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tcgagtccag tcagaggagc caaatt
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<210> 189
<211> 95
<212> DNA
<213> M. Jannaschii

<220>
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<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
1447

<400> 189
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ggaaatctat ttaaaacctc tttaatctta tgata
95

<210> 190
<211> 95
<212> DNA
<213> M. Jannaschii

<220>
<222> (1385570)...(1385664)
<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
1471

<400> 190
caactaaca ccgatcga tttaccatta cttggaaatc tatttaaaac ctctttaatc
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ttgtgataat aaattcta cgaattcgta cttat
95

<210> 191
<211> 122
<212> DNA
<213> M. Jannaschii

<220>
<222> (1362801)...(1362922)
<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
1448

<400> 191
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ggaaatctat ttaaaacctc tttaatctta tgataataaa ttctaatacga ttcgtgactt
120
at
122

<210> 192
<211> 116
<212> DNA
<213> M. Jannaschii

<220>
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<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
1470

<400> 192
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ggaaatctat ttaaaacctc tttaatcttg tgataataaa ttctaatacga ttcgtg
116

<210> 193
<211> 116
<212> DNA
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<220>
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<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
1470

<400> 193
ttatagaaca ttatgaagct ttttactcaa ctaacaaccg tatcgaattt accattactt
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ggaaatctat ttaaaacctc tttaatcttg tgataataaa ttctaatacga ttcgtg
116

<210> 194
<211> 122
<212> DNA
<213> M. Jannaschii

<220>
<222> (1362801)...(1362922)
<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
1448

<400> 194
ttatagaaca ttatgaagct ttttactcaa ctaacaaccg tatcgaattt accattactt
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ggaaatctat ttaaaacctc tttaatctta tgataataaa ttctaatacga ttcgtgactt
120
at
122

<210> 195
<211> 258
<212> DNA
<213> S. Cervesiae

<220>
<222> (220996)...(221252)
<223> Chromosome = 2 Strand = positive ConnectronObjectNumber =
293

<400> 195
gaattgttgg aataaaaatc cactatcgtc tatcaactaa tagttatatt atcaatatat
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tatcatatac	ggtgttaaga	tgatgacata	agttatgaga	agctgtcatc	gaagttagag
120					
gaagctgaag	tgcaaggatt	gataatgtaa	taggataatg	aaacatataa	aacggaatga
180					
ggaataatcg	taatattagt	atgtagaaat	atagattcca	ttttgaggat	tcctatatcc
240					
ttgaggagaa	cttctagt				
258					

<210> 196
 <211> 77
 <212> DNA
 <213> S. Cervesiae

<220>
 <222> (259722)...(259799)
 <223> Chromosome = 2 Strand = positive ConnectronObjectNumber =
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<400>	196
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ttctagtata	ttctgta
77	

<210> 197
 <211> 342
 <212> DNA
 <213> S. Cervesiae

<220>
 <222> (226562)...(226903)
 <223> Chromosome = 2 Strand = positive ConnectronObjectNumber =
 298

<400>	197
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60	
gttatattat	caatatatta tcatatacgg tgттаagatg atgacataag ttatgagaag
120	
ctgtcatcga	agttagagga agctgaagtg caaggattga taatgtaata ggataatgaa
180	
acatataaaa	cggaatgagg aataatcgta atattagtat gtagaaatat agattccatt
240	
ttgaggattc	ctatatcctt gaggagaact tctagtatat tctgtatacc taatattata
300	
gcctttatca	acaatggaat cccaacaatt atctcaacat tc
342	

<210> 198
 <211> 342
 <212> DNA
 <213> S. Cervesiae

<220>
 <222> (226562)...(226903)

<223> Chromosome = 2 Strand = positive ConnectronObjectNumber =
298

<400> 198
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gttatattat caatatatta tcatatacgg tgттаagatg atgacataag ttatgagaag
120
ctgtcatcga agttagagga agctgaagtг caaggattga taatgtaata ggataatgaa
180
acataataaaa cggaatgagg aataatcgta atattagtat gtagaaatat agattccatt
240
ttgaggattc ctatatcctt gaggagaact tctagtatat tctgtatacc taatattata
300
gcctttatca acaatggaat cccaacaatt atctcaacat tc
342

<210> 199
<211> 29
<212> DNA
<213> C. Elegans

<220>
<222> (3201942)...(3201970)
<223> Chromosome = 4 Strand = positive ConnectronObjectNumber =
17154

<400> 199
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29

<210> 200
<211> 29
<212> DNA
<213> C. Elegans

<220>
<222> (3291889)...(3291917)
<223> Chromosome = 4 Strand = positive ConnectronObjectNumber =
17190

<400> 200
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29

<210> 201
<211> 56
<212> DNA
<213> C. Elegans

<220>
<222> (3201942)...(3201997)
<223> Chromosome = 4 Strand = positive ConnectronObjectNumber =
17155

<400> 201
aaatttccgg caaatcggca aactggcaat ttgccgattt gccgaatttg tcgaca
56

<210> 202
<211> 56
<212> DNA
<213> C. Elegans

<220>
<222> (3249055)...(3249109)
<223> Chromosome = 4 Strand = negative ConnectronObjectNumber =
17171

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56

<210> 203
<211> 56
<212> DNA
<213> C. Elegans

<220>
<222> (3201942)...(3201997)
<223> Chromosome = 4 Strand = positive ConnectronObjectNumber =
17155

<400> 203
aaatttccgg caaatcggca aactggcaat ttgccgattt gccgaatttg tcgaca
56

<210> 204
<211> 362
<212> DNA
<213> S. Cervesiae

<220>
<222> (987140)...(987501)
<223> Chromosome = 4 Strand = positive ConnectronObjectNumber =
1537

<400> 204
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tattaggtat acagaatata ctagaagtcc tcctcgagga tttaggaatc cataaaaagg
120
aatctgcaat tctacacaat tctataaata ttattatcat cgttttatat gttaatatcc
180
attgatccta ttacattatc aatccttgcg ttccagcttc cactaattta gatgactatt
240
tctcatcatt tgcgtcatct tctaacaccg tatatgataa tatactagta acgtaaatac
300
tagttagtag atgatagttg atttttattc caacatacca cccataatgt aatagatcta

360
at
362

<210> 205
<211> 362
<212> DNA
<213> S. Cervesiae

<220>
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<223> Chromosome = 4 Strand = positive ConnectronObjectNumber =
1559

<400> 205
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tattaggtat acagaatata ctagaagttc tcctcgagga tttaggaatc cataaaaggg
120
aatctgcaat tctacacaat tctataaata ttattatcat cgttttatat gttaatatc
180
attgatccta ttacattatc aatccttgcg tttcagcttc cactaattta gatgactatt
240
tctcatcatt tgcgtcatct tctaacaccg tatatgataa tatactagta acgtaaatac
300
tagttagtag atgatagttg atttttattc caacatacca ccataatgt aatagatcta
360
at
362

<210> 206
<211> 387
<212> DNA
<213> S. Cervesiae

<220>
<222> (987140)...(987526)
<223> Chromosome = 4 Strand = positive ConnectronObjectNumber =
1538

<400> 206
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tattaggtat acagaatata ctagaagttc tcctcgagga tttaggaatc cataaaaggg
120
aatctgcaat tctacacaat tctataaata ttattatcat cgttttatat gttaatatc
180
attgatccta ttacattatc aatccttgcg tttcagcttc cactaattta gatgactatt
240
tctcatcatt tgcgtcatct tctaacaccg tatatgataa tatactagta acgtaaatac
300
tagttagtag atgatagttg atttttattc caacatacca ccataatgt aatagatcta
360
atgaatccat ttgtttgtta atagttt
387

<210> 207
 <211> 307
 <212> DNA
 <213> S. Cervesiae

 <220>
 <222> (991274)...(992696)
 <223> Chromosome = 4 Strand = negative ConnectronObjectNumber =
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 acttggttga ataaaaatca actatcatct actaactagt atttacgtta ctagtatatt
 120
 atcatatacg gtgttagaag atgacgcaaa tgatgagaaa tagtcatcta aattagtgga
 180
 agctgagtct atctggcgaa tataaatttt tacgctacac acgtcatcga catctaaata
 240
 tgacagtcgc tgaactgttc ttagatatcc atgctattta tgaagaacaa cagggatcga
 300
 gaaacag
 307

<210> 208
 <211> 176
 <212> DNA
 <213> S. Cervesiae

 <220>
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 <223> Chromosome = 9 Strand = negative ConnectronObjectNumber =
 3789

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 taatttagat gactatcttct catcatttgc gtcattcttct aacaccgtat atgataatat
 120
 actagtaacg taaatactag ttagtagatg atagttgatt tttattccaa cagtat
 176

<210> 209
 <211> 325
 <212> DNA
 <213> S. Cervesiae

 <220>
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 <223> Chromosome =12 Strand = positive ConnectronObjectNumber =
 5289

<400> 209
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 tagaatatac tagaagttct cctcgaggat ttaggaatcc ataaaaggga atctgcaatt

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120
ctacacaatt ctataaatat tattatcatc gttttatatg ttaatatcca ttgatacctat
180
tacattatca atccttgcggt ttcagcttcc actaatcttag atgactatctt ctcatacattt
240
gcgtcatctt ctaacaccgt atatgataat atactagtaa cgtaaatact agttagtaga
300
tgatagttga tttttattcc aacac
325

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<210>          210
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<212>          DNA
<213>          S. Cervesiae

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<220>
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<223>          Chromosome =13 Strand = positive ConnectronObjectNumber =
5753

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tattaggtat acagaatata ctagaagttc tcctcaagga tataggaatc ctcaaaatgg
120
aatctatatt tctacatact aatattacga ttattcctca ttccgtttta tatgtttcat
180
tattcctatta cattatcaat ccttgcaact cagcttcctc taacttcgat gacagcttct
240
cataaacttat gtcatacatc taacaccgta tatgataata tattgataat ataactatta
300
gttgatagac gatagtggat ttttattcca acat
334

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<210>          211
<211>          37
<212>          DNA
<213>          C. Elegans

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<220>
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<223>          Chromosome = 1 Strand = positive ConnectronObjectNumber =
2342

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<400>          211
tgaaaactac agtaattctt taaatgacta ctgtagc
37

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<210>          212
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<212>          DNA
<213>          C. Elegans

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<220>
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<223>          Chromosome = 1 Strand = positive ConnectronObjectNumber =

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2344

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37

<210> 213
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<212> DNA
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<220>
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<223> Chromosome = 1 Strand = negative ConnectronObjectNumber =
2343

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61

<210> 214
<211> 68
<212> DNA
<213> C. Elegans

<220>
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<223> Chromosome = 5 Strand = negative ConnectronObjectNumber =
24114

<400> 214
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60
gatttttcg
68

<210> 215
<211> 62
<212> DNA
<213> C. Elegans

<220>
<222> (19420036)...(19420100)
<223> Chromosome = 5 Strand = positive ConnectronObjectNumber =
29221

<400> 215
tttaaatttc ccgccaaaaa ttgactgaaa atttggattt tctttccaaa aattgacaga
60
aa
62

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<210>          216
<211>          31
<212>          DNA
<213>          C. Elegans

<220>
<222>          (19461396)...(19461428)
<223>          Chromosome = 5  Strand = positive  ConnectronObjectNumber =
29262

<400>          216
tgaaaatttg  aatttccgc  caaaaattaa  c
31

<210>          217
<211>          58
<212>          DNA
<213>          C. Elegans

<220>
<222>          (19420042)...(19420100)
<223>          Chromosome = 5  Strand = positive  ConnectronObjectNumber =
29222

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aatttccgc  caaaaattga  ctgaaaattt  ggattttctt  tccaaaaatt  gacagaaa
58

<210>          218
<211>          54
<212>          DNA
<213>          C. Elegans

<220>
<222>          (19461232)...(19461284)
<223>          Chromosome = 5  Strand = positive  ConnectronObjectNumber =
29261

<400>          218
aaaattgact  gaaaatttga  atttcagcc  aaaaattgac  tgaaaatttg  aatt
54

<210>          219
<211>          317
<212>          DNA
<213>          C. Elegans

<220>
<222>          (12766193)...(12766602)
<223>          Chromosome = 1  Strand = negative  ConnectronObjectNumber =
4291

<400>          219

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aaaattaact	gaaaatttga	atttcccgcc	aaaaattgac	tgaaaatttg	aatttcccgcc
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caaaaaaat	tgactgaaaa	tttgaatttc	ccgccaaaaa	ttgactgaaa	atttgaattt
120					
cccgccaaaa	attaattgaa	aatttgaatt	tcccgccaaa	aattaattga	aactttgaat
180					
tttcaaattt	cccgccaaaa	attaattgaa	actttgaatt	ttcaaatttc	ccgccaaaaa
240					
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300					
ccgccaaaaa	tgactga				
317					

<210> 220
 <211> 318
 <212> DNA
 <213> S. Cervesiae

<220>
 <222> (513697)...(514013)
 <223> Chromosome = 4 Strand = positive ConnectronObjectNumber = 1142

<400>	220				
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atactagaag	ttctcctcga	ggatttagga	atccataaaa	gggaatctgc	aattctacac
120					
aattctataa	atattattat	catcatttta	tatgttaata	ttcattgatc	ctattacatt
180					
atcaatcctt	gcgtttcagc	ttccactaat	ttagatgact	atttctcatc	atttgcgtca
240					
tcttctaaca	ccgtatatga	taatatacta	gtaacgtaaa	tactagttag	tagatgatag
300					
ttgattttta	ttccaaca				
318					

<210> 221
 <211> 295
 <212> DNA
 <213> S. Cervesiae

<220>
 <222> (519351)...(519645)
 <223> Chromosome = 4 Strand = positive ConnectronObjectNumber = 1156

<400>	221				
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ggaatccata	aaagggaatc	tgcaattcta	cacaattcta	taaatattat	tatcatcatt
120					
ttatatgtta	atattcattg	atocatttac	attatcaatc	cttgcgtttc	agcttccact
180					
aatttagatg	actatttctc	atcatttgcg	tcattcttcta	acaccgtata	tgataatata
240					
ctagtaacgt	aaataactagt	tagtagatga	tagttgattt	ttattccaac	aagaa

295

<210> 222
<211> 349
<212> DNA
<213> S. Cervesiae

<220>
<222> (513697)...(514323)
<223> Chromosome = 4 Strand = positive ConnectronObjectNumber =
1143

<400> 222
atTTtgagat aattgttggg attccatttt taataaggca ataattattag gtatgtagat
60
atactagaag ttctcctcga ggatttagga atccataaaa gggaatctgc aattctacac
120
aattctataa atattattat catcatttta tatgttaata ttcatgatac ctattacatt
180
atcaatctct aagtctcatt gcctttgtgc caaaaaatct gtttctaaat ttctcttcat
240
ttgtagactt aattatactg atcgttgatc tactatcagt aagtaagcct ttaataattg
300
gtttcttggt aagttcttgc acaagggtgac tgagggttatt caatagcgg
349

<210> 223
<211> 69
<212> DNA
<213> S. Cervesiae

<220>
<222> (519333)...(519401)
<223> Chromosome = 4 Strand = negative ConnectronObjectNumber =
1155

<400> 223
gaggagaact tctagtatat ctacatacct aatattattg ccttattaaa aatggaatcc
60
caacaatta
69

<210> 224
<211> 324
<212> DNA
<213> S. Cervesiae

<220>
<222> (731677)...(732001)
<223> Chromosome =12 Strand = positive ConnectronObjectNumber =
5289

<400> 224
ggtgaatttt gagataattg ttgggattcc atttttaata aggcaataat attaggtatg
60

tagaatatac	tagaagttct	cctcgaggat	ttaggaatcc	ataaaaaggga	atctgcaatt
120					
ctacacaatt	ctataaatat	tattatcatc	gttttatatg	ttaatattca	ttgatccctat
180					
tacattatca	atccttgcgt	ttcagcttcc	actaatttag	atgactattt	ctcatcattt
240					
gcgtcatctt	ctaacaccgt	atatgataat	atactagtag	gtaaataacta	gttagtagat
300					
gatagttgat	ttttattcca	acac			
324					

<210> 225
 <211> 366
 <212> DNA
 <213> S. Cervesiae

<220>
 <222> (645463)...(645828)
 <223> Chromosome = 4 Strand = positive ConnectronObjectNumber =
 1243

<400>	225				
cgtgttttat	ctcatgttgt	tcgttttggt	attgagatat	atgtgggtaa	ttagataaatt
60					
gttgggattc	cattgttgat	aaaggctata	atattaggta	tacagaatat	actagaagtt
120					
ctcctcgagg	atntaggaat	ccataaaaagg	gaatctgcaa	ttctacacaa	ttctataaat
180					
attattatca	tcgttttata	tgttaaatatt	cattgatcct	attacattat	caatccttgc
240					
gtttcagctt	ccactaat	agatgactat	ttctcatcat	ttgcgtcatc	ttctaacacc
300					
gtatatgata	atatactagt	aacgtaaata	ctagttagta	gatgatagtt	gatttttatt
360					
ccaaca					
366					

<210> 226
 <211> 273
 <212> DNA
 <213> S. Cervesiae

<220>
 <222> (651079)...(651444)
 <223> Chromosome = 4 Strand = positive ConnectronObjectNumber =
 1272

<400>	226				
tgagatatat	gtgggtaatt	agataattgt	tgggattcca	ttgttgataa	aggctataat
60					
attaggtata	cagaatatac	tagaagttct	cctcgaggat	ttaggaatcc	ataaaaaggga
120					
atctgcaatt	ctacacaatt	ctataaatat	tattatcatc	gttttatatg	ttaatattca
180					
ttgatctata	ctagtaacgt	aaatactagt	tagtagatga	tagttgattt	ttattccaac
240					
agttataagg	ttgtttcata	tgtgttttat	gaa		

273

<210> 227
<211> 327
<212> DNA
<213> S. Cervesiae

<220>
<222> (645468)...(646073)
<223> Chromosome = 4 Strand = positive ConnectronObjectNumber =
1244

<400> 227
tttatctcat gttgttcgtt ttgttattga gatatatgtg ggtaattaga taattgttgg
60
gattccattg ttgataaagg ctataatatt aggtatacag aatatactag aagttctcct
120
cgaggattta ggaatccata aaagggaatc tgcaattcta cacaattcta taaatattat
180
tatcatgtct cgatgtagta tacgtataaa ttattacctg atacttcac ctaagtctc
240
attgcctttg tgccaaaaaa tctgtttcta aatttctctt catttgtaga cttaattata
300
ctgatcgttg atctactatc agtaagt
327

<210> 228
<211> 309
<212> DNA
<213> S. Cervesiae

<220>
<222> (651002)...(651496)
<223> Chromosome = 4 Strand = negative ConnectronObjectNumber =
1271

<400> 228
tggtgtatct caaaatgaga tatgtcagta tgacaatacg tcatcctaaa cgttcataaa
60
acacatatga aacaacctta taactgttgg aataaaaatc aactatcatc tactaactag
120
tatttacgtt actagtatat tatcatatac ggtgttagaa gatgacgcaa atgatgagaa
180
atagtccaac aatggaatcc caacaattat ctaattaccc acatatatct catggtagcg
240
cctgtgcttc ggttacttct aaggaagtcc acacaaatca agatccgtta gacgtttcag
300
cttccaaaa
309

<210> 229
<211> 325
<212> DNA
<213> S. Cervesiae

<220>

<222> (731677)...(732001)
 <223> Chromosome =12 Strand = positive ConnectronObjectNumber =
 5289

<400> 229
 ggtgaatttt gagataattg ttgggattcc atttttaata aggcaataat attaggtatg
 60
 tagaatatac tagaagttct cctcgaggat ttaggaatcc ataaaaggga atctgcaatt
 120
 ctacacaatt ctataaatat tattatcatc gttttatatg ttaatattca ttgatcctat
 180
 tacattatca atccttgcg ttcagcttcc actaatttag atgactatct ctcatcattt
 240
 gcgtcatctt ctaacaccgt atatgataat atactagtaa cgtaaatact agttagtaga
 300
 tgatagttga tttttattcc aacac
 325

<210> 230
 <211> 365
 <212> DNA
 <213> S. Cervesiae

<220>
 <222> (704030)...(704394)
 <223> Chromosome =15 Strand = positive ConnectronObjectNumber =
 7102

<400> 230
 catgattaat atgaccaatc ggcgtgtggt tttgaaaagt ggggtgaattt tgagataatt
 60
 gttgggattc catttttaaat aaggcaataa tattaggtat gtagaatgta ctagaagttc
 120
 tcctcaagga ttttaggaatc catgaaaggg aatctgcaat tctacacaat tctataaata
 180
 ttattatcat catttttatat gttaatatcc attgatccta ttacattatc aatccttgcg
 240
 tttcagcttc cactaattta gatgactatt tctcatcatt tgcgtcatct tctaacaccg
 300
 tatatgataa tatactagta acgtaaatac tagttagtag atgatagttg atttttattc
 360
 caaca
 365

<210> 231
 <211> 365
 <212> DNA
 <213> S. Cervesiae

<220>
 <222> (709690)...(710053)
 <223> Chromosome =15 Strand = positive ConnectronObjectNumber =
 7117

<400> 231
 tgaaaagtgg gtgaattttg agataattgt tgggattcca tttttaataa ggcaataata

60
 ttaggtatgt agaatgtact agaagttctc ctcaaggatt taggaatcca tgaaagggaa
 120
 tctgcaattc tacacaattc tataaatatt attatcatca ttttatatgt taatattcat
 180
 tgatcctatt acattatcaa tccttgcggt tcagcttcca ctaatttaga tgactatttc
 240
 tcatcatttg cgtcatcttc taacaccgta tatgataata tactagtaac gtaaatacta
 300
 gttagtagat gatagttgat ttttattcca acagttttat atacctctct tatttagtat
 360
 aagaa
 365

<210> 232
 <211> 357
 <212> DNA
 <213> S. Cervesiae

<220>
 <222> (704138)...(704494)
 <223> Chromosome =15 Strand = negative ConnectronObjectNumber =
 7103

<400> 232
 aagaacattg ctgatgtgat gacaaaacct cttccgataa aaacatttaa actattaact
 60
 aacaaatgga ttcattagat ctattacatt atgggtggta tgttggaata aaaatcaact
 120
 atcatctact aactagtatt tacgttacta gtatattatc atatacgggtg ttagaagatg
 180
 acgcaaatga tgagaaatag tcatctaaat tagtggaagc tgaaacgcaa ggattgataa
 240
 tgtaaatagga tcaatgaata ttaacatata aaatgatgat aataatattt atagaattgt
 300
 gtagaattgc agattccctt tcatggattc ctaaatacctt gaggagaact tctagta
 357

<210> 233
 <211> 66
 <212> DNA
 <213> S. Cervesiae

<220>
 <222> (709483)...(709548)
 <223> Chromosome =15 Strand = positive ConnectronObjectNumber =
 7116

<400> 233
 ccattctgtg gaggtggtac tgaagcaggt tgaggagaga catgatgatg gttctctgga
 60
 acagct
 66

<210> 234
 <211> 325

<212> DNA
 <213> S. Cervesiae

 <220>
 <222> (731677)...(732001)
 <223> Chromosome =12 Strand = positive ConnectronObjectNumber =
 5289

<400> 234
 ggtgaatttt gagataattg ttgggattcc atttttaata aggcaataat attaggtatg
 60
 tagaatatac tagaagttct cctcgaggat ttaggaatcc ataaaaggga atctgcaatt
 120
 ctacacaatt ctataaatat tattatcatc gttttatatg ttaatatcca ttgatoctat
 180
 tacattatca atccttgcggt ttcagcttcc actaatttag atgactatct ctcattcattt
 240
 gcgtcatctt ctaacaccgt atatgataat atactagtaa cgtaaatact agttagtaga
 300
 tgatagttga tttttattcc aacac
 325

<210> 235
 <211> 33
 <212> DNA
 <213> C. Elegans

 <220>
 <222> (10245691)...(10245722)
 <223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
 3101

<400> 235
 caaatcgga aattgccga attgaacatt tcc
 33

<210> 236
 <211> 54
 <212> DNA
 <213> C. Elegans

 <220>
 <222> (10261616)...(10261669)
 <223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
 3120

<400> 236
 aaacgatttt tccggcaaat cggcaaattg ccggaattgt aatttccggc aaat
 54

<210> 237
 <211> 55
 <212> DNA
 <213> C. Elegans

<220>
<222> (10245748)...(10245802)
<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
3103

<400> 237
ttaaaatttc cggcaaattcg gcaaattggc agaaatgaaa ctcacggcaa atcgg
55

<210> 238
<211> 61
<212> DNA
<213> C. Elegans

<220>
<222> (10258394)...(10258455)
<223> Chromosome = 1 Strand = positive ConnectronObjectNumber =
3119

<400> 238
cccgcatttt ttgtagatca aaccgtaatg ggacggcctg gcaacacgtg attttccaaa
60
t
61

<210> 239
<211> 124
<212> DNA
<213> C. Elegans

<220>
<222> (2053620)...(2053742)
<223> Chromosome = 4 Strand = positive ConnectronObjectNumber =
16760

<400> 239
ggcaaattgc cgaaattgaa catttcggc aaatcggcaa attgccggaa ttgaacattt
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ccggcaaattc ggcaaattgc cggaattgaa catttcggc aaatcggcaa attgccggaa
120
ttga
124

<210> 240
<211> 141
<212> DNA
<213> C. Elegans

<220>
<222> (10893918)...(10894058)
<223> Chromosome = 3 Strand = positive ConnectronObjectNumber =
14840

<400> 240

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aaaaatttcc  ggcaagtcgg  caattttccg  aaaatgaaaa  tttccggcaa  atcggcaaat
60
tgccggaatt  gaaaattcct  ggcaaatacag  caaatttgcg  gcaaatacggc  aatttgccga
120
aaatgaaaaat  tttccggcaaa  t
141

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<210>          241
<211>          98
<212>          DNA
<213>          C. Elegans

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<220>
<222>          (10981034)...(10981131)
<223>          Chromosome = 3  Strand = positive  ConnectronObjectNumber =
15042

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<400>          241
caaatcggta  ggtaaattgg  ccaaacttga  aaattttcgg  caaatcggca  aattccgcca
60
actgaacatt  tccggcaaat  cggcaaattg  ctcgaact
98

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<210>          242
<211>          141
<212>          DNA
<213>          C. Elegans

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<220>
<222>          (10893918)...(10894058)
<223>          Chromosome = 3  Strand = positive  ConnectronObjectNumber =
14841

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<400>          242
aaaaatttcc  ggcaagtcgg  caattttccg  aaaatgaaaa  tttccggcaa  atcggcaaat
60
tgccggaatt  gaaaattcct  ggcaaatacag  caaatttgcg  gcaaatacggc  aatttgccga
120
aaatgaaaaat  tttccggcaaa  t
141

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<210>          243
<211>          55
<212>          DNA
<213>          C. Elegans

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<220>
<222>          (10979986)...(10980040)
<223>          Chromosome = 3  Strand = negative  ConnectronObjectNumber =
15041

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<400>          243
cggcaattgc  cgttcggcaa  tttgccaaatt  tgccggaaat  tttcaattcc  ggcaa
55

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<210> 244
 <211> 124
 <212> DNA
 <213> C. Elegans

 <220>
 <222> (2053620)...(2053742)
 <223> Chromosome = 4 Strand = positive ConnectronObjectNumber =
 16760

<400> 244
 ggcaaattgc cgaaattgaa catttcgggc aaatcggcaa attgccggaa ttgaacattt
 60
 ccggc aaatc ggcaaattgc cggaattgaa catttcgggc aaatcggcaa attgccggaa
 120
 ttga
 124

<210> 245
 <211> 336
 <212> DNA
 <213> C. Elegans

 <220>
 <222> (11116705)...(11117226)
 <223> Chromosome = 3 Strand = positive ConnectronObjectNumber =
 15365

<400> 245
 aaaatttccg gcaaattcggc aatttgccaa aaattgaaat ttccggcaaaa tcggcaattt
 60
 gtcaaaaatg aaaatttccg gcaaattcggc aaattgccga aaatgaaaat ttccggcaaaa
 120
 tcggc aaatc tcgggaactg aaaatttccg gcaaattcggc aatttgccat aaatgaacat
 180
 ttccggggcg aaaattaaaa tttccgccat atcggcaatt tgccaaaaaa ttaaaatttc
 240
 cggc aaatc gcaaattgcc ggaattcaaa atttcgggca aaccggcaaaa ttgccgggaac
 300
 tcaaaattcc cggc aaatc gcaaattgcc ggaatt
 336

<210> 246
 <211> 68
 <212> DNA
 <213> C. Elegans

 <220>
 <222> (11215714)...(11215781)
 <223> Chromosome = 3 Strand = positive ConnectronObjectNumber =
 15627

<400> 246
 tggcaaaccg gcaaattgcc ggaattgaac atttcgggca aatcggcaat ttgccggaat
 60

tgaaattt
68

<210> 247
<211> 60
<212> DNA
<213> C. Elegans

<220>
<222> (11116771)...(11116830)
<223> Chromosome = 3 Strand = negative ConnectronObjectNumber =
15366

<400> 247
tgccgatttg cgggaaattt tcattttcgg caatttgccg atttgccgga aattttcatt
60

<210> 248
<211> 54
<212> DNA
<213> C. Elegans

<220>
<222> (11215572)...(11215625)
<223> Chromosome = 3 Strand = positive ConnectronObjectNumber =
15625

<400> 248
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54

<210> 249
<211> 124
<212> DNA
<213> C. Elegans

<220>
<222> (2053620)...(2053742)
<223> Chromosome = 4 Strand = positive ConnectronObjectNumber =
16760

<400> 249
ggcaaattgc cgaaattgaa catttcggc aaatcggcaa attgccgga ttgaacattt
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ccggcaaatc ggcaaattgc cggaattgaa catttcggc aaatcggcaa attgccgga
120
ttga
124